The Achieving Society

Applying the methods of the behavioral sciences, this book provides a factual basis for evaluating theories — economic, historical, and sociological — that explain the rise and fall of civilizations.

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A FREE PRESS PAPERBACK
THE MACMILLAN COMPANY

By DAVID C. McCLELLAND

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THE FREE PRESS
A Division of Macmillan Publishing Co., Inc.
NEW YORK

Collier Macmillan Publishers
LONDON

Printed in the United States of America

The Free Press
A Division of Macmillan Publishing Co., Inc.
866 Third Avenue, New York, N.Y. 10022

Collier Macmillan Canada, Ltd.

Published by arrangement with D. Van Nostrand Company, Inc.

FIRST FREE PRESS PAPERBACK EDITION 1967

printing number
9 10

To

Rowan Gaither and Bernard Berelson

in gratitude for their faith in the future

of the behavioral sciences

Preface

This book grew out of an attempt by a psychologist, trained in behavioral science methods, to isolate certain psychological factors and to demonstrate rigorously by quantitative methods that these factors are generally important in economic development. The scope of such an enterprise turned out to be truly alarming for one whose background in the social sciences was slight to begin with. It required specialized knowledge on everything from population problems, to coal imports in England from the 16th to the 19th century, to methods of computing rates of economic growth, to sources of children's books, to management practices in Russia, Italy and Mexico, to the pottery of Ancient Greece and Pre-Incan Peru. Let me confess at the outset (for it will be obvious soon enough) that I have not managed to become a real professional in many of these areas of knowledge, though I have had the advantage of much expert advice and assistance. The dilemma of the "generalist" trying to acquire specialized knowledge in a hurry is nicely illustrated by what happened to me when I asked a colleague, an eminent Harvard historian, to recommend "a" book to me that would bring me up to date on English history. I also mentioned that as a budding scientist in college, I had unfortunately managed to escape all courses in history, so that my mind was practically a "tabula rasa" on the subject. He simply looked at me aghast, murmured "my God!" and turned away. Perhaps the self-taught scholar deserves such a response—at any rate he sometimes gets it—and so may this book among specialists on particular topics it had to cover in the search for the broadest possible test of the hypothesis that a particular psychological factor—the need for Achievement—is responsible for economic growth and decline.

The problem of covering so much intellectual territory is actually twofold. On the one hand, there is the strong probability of simple human error. For example, in the thousands of calculations on which this book is based, it is unlikely that no mistakes have been made. Not even the mechanical equipment that produced many of the numbers used proved infallible. It coughed at least once in some thousands of computations and refused to give one correlation it should have. Possibly in some places I have used incorrect or out-of-date data—e.g., on the electrical production of Pakistan or the location of 6th-century Greek vase remains. In others I may have overlooked an obviously better statistic or used an inadequate method of data analysis. For such errors, though I have tried hard to eliminate them, I apologize in advance and hope readers more expert than I will correct them. The only excuse is the sheer scope of the undertaking.

On the other hand, and more seriously, there may be errors of conceptualization. It was hard to learn enough about so many different matters to assure a grasp of their main features. I was constantly aware of the danger of being naive about a very complex historical or economic problem. Yet I also came to feel that naiveté is not wholly a disadvantage. For example, in trying to solve the problem of how to compute comparative rates of economic growth, I was not hampered by any preconceptions. In fact, I had dropped my one course in college economics because it seemed to me such an abstract, rationalistic discipline that took so little account, at least at that time, of how men actually behave economically. So, having little formal training in economics, I did not accept so easily as most economists do by habit, the long tradition of using index numbers and estimates of national income in fixed prices. This traditional method seemed to be so objectionable that I adopted a different approach, based on sampling theory and regression analysis. I do not expect economists readily to accept such an approach, even for the limited purpose of comparing rates of growth, nor am I sure that it is entirely adequate, yet I do feel that my very lack of training in economics may have made it easier for me to break with a traditional but inadequate method of measurement and to look at the problem in a different way.

But how did I get involved in covering so much territory in the first place? Why risk being superficial? The answer lies in the general methodological approach of the book, which is in the tradition of comparative history, comparative economics or a psychology interested in generalizations that apply to all or most of the human species. In other words, the book attempts to answer *general* questions, not specific ones; it does not probe the particulars of the Industrial Revolution in England but examines the factors underlying that revolution which were common to other such waves of rapid economic development in history.

I am well aware that the search for such generalizations is often suspect. What is the point, the argument runs, in knowing what generally happens (even if it were possible to know), when the really important fact is what happened *in this case*, in this country at this particular time? For after all I am by profession a clinical psychologist where such an argument is also particularly appropriate. What good is a generalization about human nature when you really want to know what makes this particular person neurotic at this time? Why not study him as an individual, rather than waste time analyzing other people in order to discover what makes people neurotic in general?

It is perhaps because I have spent time analyzing particular cases that I feel the need for generalizations and a comparative frame of reference. It is so easy to be mistaken if you analyze only a particular case. The clinical psychologist may decide, for example, that George is neurotic because his mother mistreated him. The detailed case record makes the point very clear. Yet might not the clinician's view of the case be quite different if he knew that mothers from George's social background generally mistreated their sons and that most of those sons did not become neurotic? I have seen in writing over and over again that such and such a country, say India, cannot develop rapidly economically because it has such a high population density and/or a high net reproduction rate. The case record makes it clear: it does have a high population density, a high net reproduction rate; it is having difficulty developing. The two events would seem to be logically connected because the more mouths there are to feed, the harder it is to feed them adequately. Yet doesn't the perspective on such a case analysis change when we discover that (1) in *general* rates of population growth have not been connected with rates of economic growth (Chapter 1) and (2) India, as compared with nations in *general*, is at the present time developing rapidly despite her population problems (Chapter 3)?

Generalizations can be easily criticized. For example, some reader is almost certain to say that I have greatly oversimplified the interpretation of history, that I believe a few psychological variables can account wholly for economic development—a conclusion that can be easily demonstrated to be false for a particular country in a particular time period by someone who really understands what went on then in a more profound way than I do. Such an accusation is true but only partly true. It is justified in the sense that economic development in a particular country is a complex result of the interaction of many more factors than are considered here, but not in the sense that I am unaware of it.

It is important, therefore, to understand at the outset the simplicity of this book—what it can accomplish and what it cannot. What it does try to do is to isolate certain psychological factors and to demonstrate rigorously by quantitative scientific methods that these factors are *generally* important in economic development. Simplification is an absolute prerequisite for such rigorous scientific tests, but it is superficial only in two senses: first, it leaves out of consideration other variables which may be equally or more important, and secondly, it does not deal directly with the problem of how these variables (shown to be generally important) actually operate in a particular historical instance. It is precisely at this point, however, that the generalizations should begin to be useful to historians and economists interested in particular cases. Though it is not my purpose to deal with such cases, it is my hope that the generalizations established will help in the analysis of particular events in history, in exactly the same way that the generalizations of a physicist help an engineer design and build a particular bridge in a particular spot at a particular time.

But all of the foregoing argument tends rather to explain why I might *not* have written this book; or why I, as a psychologist accustomed to sweeping generalizations about human behavior at its simplest levels, should have hesitated a long while before applying the same approach to complex social phenomena. How then, did I happen to write it? The Ford Foundation was really responsible. It not only provided the money, but—what is far more important—the vision needed to undertake the research. The charter for the Foundation is really a remarkable document, produced as it was by some of the leading men of our generation. Its central premise is that the great need of our time is for improvement in human behavior. It then proposes operating programs aimed at such improvement in the areas of international peace, democratic political institutions, education, and the economic order. Underpinning these action programs there was to be a Division of the Behavioral Sciences to aid basic research on human behavior, so that more and better knowledge would be available for the use of the operating programs. The conception is not unlike that of a large modern corporation which has a number of operating divisions and a research division which stockpiles knowledge *over the long run* for the use of the operating divisions.

The plan for a Behavioral Sciences Division to promote the development of basic knowledge of human behavior was idealistic, perhaps visionary, partly because the behavioral sciences are only just beginning to accumulate knowledge of major social usefulness and partly because many men regard them as less useful than they really are. At any rate, the Behavioral Sciences Division of The Ford Foundation no longer exists, but while it lasted, its patronage was magnificent, and the challenge it presented raised the sights of behavioral scientists who might otherwise have been content to work on less ambitious projects.

It was my good fortune to be associated with the Division in its early days and to absorb some of its spirit of hope and enthusiasm for the role that knowledge of human behavior might play in helping man control his destiny. The research reported here was conceived in that spirit, to determine what value our psychological knowledge of human motivation might have in understanding so complex a social phenomenon as economic development. It owes its existence therefore very largely to the vision and courage of two men—the late Rowan Gaither, Chairman of the Program Committee for the Foundation, later its President, and particular patron of the Behavioral Sciences Division; and Bernard Berelson, Director of the Division, the vigor of whose imagination was largely responsible for the major impact it had on the behavioral sciences during its all-too-short existence. Later I also received valuable additional support for the study of businessmen from the Program in Economic Development and Administration of the Foundation, under the leadership of Thomas Carroll.

Neither money nor vision alone could have created it, however. The book also owes much to a corps of advisers, devoted research associates, and assistants which is unusually large because of the wide scope of the investigation. Though it is far too inadequate a recognition for the help I received, I wish to record here my indebtedness to John W. Atkinson, to Robert Knapp and Timothy Leary for general sympathetic advice and assistance; to B. F. Hoselitz, Gerald Meier, Gustav Papanek, and Franco Modigliani for helping me acquire what little knowledge of economics I have (though they certainly should not be held responsible for my mistakes); also to Robert H. Knapp, Bernard Rosen and Joseph Veroff, for working on their own initiative on research problems related to the general theme of the investigation; and to the members of the Research Seminar at Wesleyan University who worked through the early problems of the research design—Walter Reitman, Ralph Haber, Richard deCharms, Elliot Aronson, William Morrison, David Berlew, and Roberta Cohen.

In carrying out the research reported I am particularly indebted to Thomas E. Shipley, Jr., and David Bakan for general advice and assistance; to H. W. Wendt, John Takeshita, Arrigo Angelini and P. V. Veeraraghavan for supervising the testing of adolescent boys in Germany, Japan, Brazil and India, respectively; to Julie Maehling and Robert Cohler, Ralph Haber and Richard deCharms for help in developing the coding system for the children's readers; to Salvatore Maddi, Ellen Silver, Robert Cohler, Peter Lenrow, Norman Bradburn, and David Berlew for the exacting and tedious task of applying the coding system; to Juan Cortés for his research on Spanish economic history; to Harriet Turtletaub particularly for assistance in assembling the climatological data reported in Chapter 9; to Allan Kulakow for ratings of preliterate tribes on a variety of factors; to Marc Swartz and Donald Lathrap for help on the study of pre-Incan Peru; to Evon Vogt and Frank Miller for planning and carrying out a study of *n* Achievement in two Mexican villages; to Thomas Fraser and the American Friends Service Committee for a similar study in Orissa Province, India; and to John and Mary Elmendorf, Elliott Dantzig and Frank Brandenburg for their help in my brief study of problems of economic development in Mexico.

For assistance in collecting and analyzing tests from businessmen, government officials, and others, I am greatly indebted to the Sloane Fellow Program at MIT and the Middle and Advanced Management Programs at the Harvard Business School; in particular to Abraham Zaleznik, James Guyot, George Litwin, Ann Litwin, John Hill, and staff members of several industrial corporations that prefer to remain anonymous. Overseas testing of businessmen and professionals was carried out through the valued assistance of Flavia Zaccone Derossi in Italy, Norman Bradburn in Turkey, and M. Choynowski in Poland. Furthermore, the data could never have been assembled, kept in order, and analyzed without the able and conscientious assistance of Vera Aronson, Dorothy Maddi, Marian Cartland, Harry Scarr, David Winter, and particularly Richard Horowitz and Bruce Finnie, who supervised the processing of mountains of figures through the IBM machines. Last, but not least, I should like to acknowledge a very special debt to my secretary, Alice Thoren, not only for trying valiantly to keep my life in order but also for preparing the final manuscript, with the able assistance of Doris Simpson.

What ultimately made it possible for me to pull together the many threads of this research enterprise and to reflect a little on their implications was a fellowship from the Guggenheim Foundation, which was the more welcome for having no strings attached. It provided the means, and Italy the sense of perspective and of leisure, that in the end made the book possible. Its final chapters have been written under the dramatic influence of the efforts of a formerly backward country to speed its rate of economic development.

David C. McClelland

Florence, Italy, July 1959
Tepoztlan, Morelos, Mexico, August 1960

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Explaining Economic Growth

The Problem

From the top of the *campanile*, or Giotto's bell tower, in Florence, one can look out over the city in all directions, past the stone banking houses where the rich Medici lived, past the art galleries they patronized, past the magnificent cathedral and churches their money helped to build, and on to the Tuscan vineyards where the *contadino* works the soil as hard and efficiently as he probably ever did. The city below is busy with life. The university halls, the shops, the restaurants are crowded. The sound of *Vespas*, the "wasps" of the machine age, fills the air, but Florence is not today what it once was, the center in the 15th century of a great civilization, one of the most extraordinary the world has ever known. Why? What produced the Renaissance in Italy, of which Florence was the center? How did it happen that such a small population base could produce, in the short span of a few generations, great historical figures first in commerce and literature, then in architecture, sculpture and painting, and finally in science and music? Why subsequently did Northern Italy decline in importance both commercially and artistically until at the present time it is not particularly distinguished as compared with many other regions of the world? Certainly the people appear to be working as hard and energetically as ever. Was it just luck or a peculiar combination of circumstances? Historians have been fascinated by such questions ever since they began writing history, because the rise and fall of Florence or the whole of Northern Italy is by no means an isolated phenomenon. In fact, as Kroeber (1944) has demonstrated, "configurations of culture growth" are the rule rather than the exception, "successes . . . occur close together in relatively brief periods within nations or limited areas" (1944, p. vii).

This book will not take as its province all kinds of cultural growth—artistic, philosophical, military—but will try to shed some light on a narrower problem, namely, the reasons for economic growth and decline. The way wealth is distributed is a matter of special interest, partly because it may well be basic to growth in other cultural areas and partly because it has become so uneven in the past century that curiosity has been aroused. Certain countries, primarily in northern Europe and North America, have accumulated wealth probably at a faster rate and certainly to a much higher average level than has ever been known before in the history of the world. In the United States, *per capita* income in constant prices rose from around $244 in 1850 to around $1140 in 1950, a five-fold increase (Woytinsky, 1953, p. 383). In Great Britain average income quadrupled in the same period. At the present time, the average *per capita* income varies tremendously from one country to another, as Table 1.1 demonstrates. Thus, the average person

TABLE 1.1 SOME REPRESENTATIVE NATIONAL DIFFERENCES IN SHARES OF POPULATION AND INCOME AND IN PER CAPITA INCOME (1948), IN U.S. DOLLARS, BY REGIONS OF THE WORLD

	Per Capita Income in U.S. dollars (1948)*	Per cent of Population (1950)**	Per cent of World Income (1948)*
North America		6.8%	42.9%
United States	$1,525		
Canada	895		
Middle America		2.1	1.3
Mexico	106		
Cuba	296		
South America		4.5	2.9
Argentina	315		
Brazil	112		
Chile	180		
Europe		15.9	26.4
United Kingdom	777		
Sweden	805		
France	418		
Poland	190		
Greece	95		
USSR	181	7.3	6.4
Asia		54.9	15.7
Turkey	143		
India	75		
Africa		8.0	2.9
Belgian Congo	35		
Union of South Africa	347		
Oceania		.5	1.5
Australia	812		

* From Woytinsky, W. S. and E. S. *World Population and Production*. New York: Twentieth Century Fund, 1953. Pp. 392-394.
** From *United Nations Statistical Yearbook 1956*, p. 37.

in northern Europe or the United States has ten to twelve times as much wealth at his disposal as the average person in most of Africa or Asia. Or, to put it in its most striking fashion, approximately 7 per cent of the world's population in North America enjoy about 43 per cent of the world's wealth, while 55 per cent of the population, in Asia, have only about 16 per cent of the world's wealth. Even a quick glance at the table raises some interesting questions. Why should Argentina lag so far behind the United States or

Australia in per capita income? Is it so much less favored by climate and natural resources? Or compare France and Poland with the United Kingdom and Sweden. The differences here in climate and natural resources are by no means outstanding, and yet there is a marked difference in economic development to date. One is led to think immediately of differences in the peoples who live in those countries—in their motives and values, social and political institutions. In fact, in our time the political question has become paramount. It is widely felt that the reason why some countries have not developed as rapidly as others is because they have been improperly governed, that is, exploited either by colonial powers or by internal minorities.

One of the fundamental differences between the Communist countries and the Western democracies lies precisely in their views as to how the people should be governed so as to bring about their economic improvement. Everyone accepts the goal of economic development as of paramount importance. Certainly one of the most striking phenomena of our times is the great effort that the populous poor nations of the world—India, China, Indonesia—are making to catch up with the industrialized West. The differences arise over how best to do it, the Communists stressing centralized authoritarian rule by a minority and the Western democracies advocating a freer participation by all segments of the population in their own self-development.

For practical political reasons, then, as well as to satisfy scientific curiosity, it has become of very great importance to understand some of the forces that produce rapid economic development. It would certainly not surprise us to discover that these forces lie largely in man himself—in his fundamental motives and in the way he organizes his relationships to his fellow man. At least it should be worth a serious attempt to see what modern psychology can contribute to an understanding of why some men concentrate on economic activities and are conspicuously successful at them. Such is the primary purpose of this book. The reader should, however, not set his hopes too high. Modern quantitative psychology is young, about fifty years old to be exact, even younger than the study of economics. And the scientific study of motives and values is even younger still. Furthermore, psychology has not concerned itself much with problems of economics. The present effort should, therefore, be viewed as a first attempt by a psychologist interested primarily in human motivation to shed some light on a problem of historic importance.

General Explanations of Cultural Growth and Decline

Before we plunge into the heart of the matter, it will be worth while to consider the problem in historical perspective. After all, many distinguished men have written on the subject of why civilizations wax and wane, or more particularly on what are the forces responsible for economic growth and decline. The psychologist's contribution can best be seen against the background of such other explanations. There may be many who feel that the psychologists can contribute little because we have explanation enough already or because no general explanation is in the end really possible. Those who take the latter point of view simply avoid the whole problem. They contend that there are too many facts that no general explanation can fit. For example, Muller, who takes what he calls the "tragic" view of history, at times appears to argue that Byzantium persisted as a great, or reasonably great, civilization for hundreds of years for no good reason whatsoever. In his words, "What kept this static civilization going? Why was it preserved by a tradition that failed to preserve Rome? I can see no very good reasons, or at least none that illustrates a satisfying philosophy of history. . . . it had a strong walled capital, with an excellent location for purposes of trade and defense. . . . it had the secret of 'Greek fire,' the diabolic weapon that scattered or destroyed enemy fleets besieging Constantinople. . . . Above all, it had good luck in its emperors during its worst crises, being periodically saved by the emergence of a strong, able ruler. This looks like mere luck, because the rise of such a savior was not provided for by any peculiar wisdom in its political institutions." (1957, p. 20.)

Muller seems to be wondering in this passage, as many skeptics have before him, whether history makes any sense at all. Most historians, however, would go at least one step further, as he himself does in this passage, and search for some particular factor—a strong ruler, a military secret, a geographical location—which contributed to the growth, preservation, or fall of a particular civilization at a particular time. Many would then stop here and regard a search for any *general* explanation of the rise and fall of civilizations as useless because the reasons are uniquely different in every case.

In a sense they are right. Every event is in some respects different from every other event. No historical epoch is precisely like any other despite the ability of men like Toynbee and Spengler to see similarities. No person is exactly like any other person. No stone, for that matter, is exactly like any other stone. Yet beginning with stones, scientists have seen similarities and made generalizations based on features that events or objects have in common without denying the uniqueness of any particular event or object. Psychologists are so used to being told that they can never make generalizations about anything so complex and variable as human nature that they may be forgiven for assuming that history could hardly be more difficult to generalize about. Perhaps if we grant at the outset that all instances of economic growth or cultural flowering are unique in some respects, the skeptics might then at least admit the possibility that certain common features of many or most of them could also be identified.

Many attempts have been made to discover such common features and arrive at general interpretations. One that is only slightly less skeptical than Muller's "ironical" view of history has much in common with the anthro-